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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,074

09/18/2003

Roger P. Jackson

10,250

7659

7590

09/05/2006

John C. McMahon

PO Box 30069

Kansas City, MO 64112

EXAMINER

RAMANA, ANURADHA

ART UNIT

PAPER NUMBER

3733

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No. 10/666,074	Applicant(s) JACKSON, ROGER P.	
	Examiner Anu Ramana	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 12, 2006 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-16, 18-23 and 26-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. Applicant does not disclose that the posterior threads extend for at least two revolutions on the posterior cylindrical portion.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-11, 13-19, 21-23, 26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Nolan (US 6,117,174).

Nolan discloses a spinal implant or "interbody spacer device" 2 including: an anterior conical portion; a posterior cylindrical portion joined to the conical portion at the converged end of the conical portion; and an engaging member or disc or "end cap member" or "stabilizing structure" 14' (Figs. 6a, 11, 12, 17 and 18, col. 1, lines 66-67, col. 2, lines 1-47, col. 4, lines 7-56, col. 5, lines 12-35 and col. 7, lines 11-22).

Claims 24, 25, 27 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Shapiro et al. (US 6,436,139).

Shapiro et al. disclose a threaded interbody spacer 10 with opposite lateral concave surfaces and a helical thread wherein spacer 10 tapers from a smaller diameter at the insertion end to a larger diameter at the opposite end, thus having a "substantially funnel-shaped side profile" (Figs. 1, 7 and 18, col. 3, lines 26-67 and cols. 4-8).

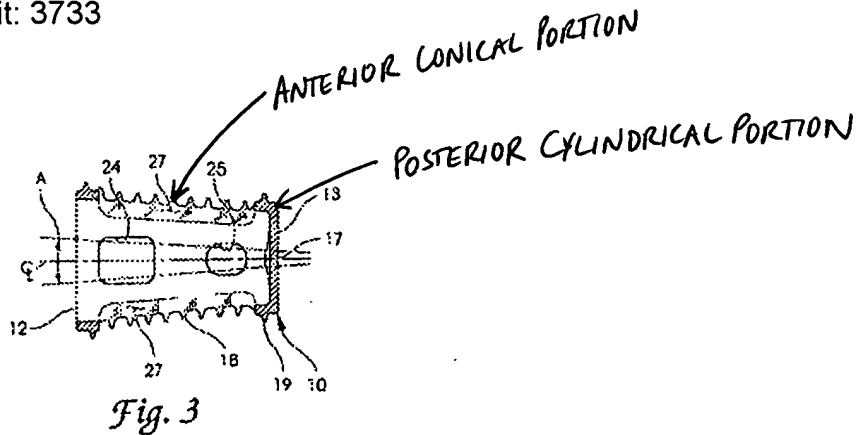
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 8-10, 15-18, 23, 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zdeblick et al. (US 5,669,909).

Zdeblick et al. disclose an interbody fusion device including an anterior conical portion, a posterior cylindrical portion joined to the anterior conical portion at the converged end of the conical portion and partial thread members extending radially outward from the conical and cylindrical portions (Figs. 3, 8A and 14(d), col. 5, lines 41-59 and col. 12, lines 21-34). See marked up Fig. 3 from Zdeblick et al. on the following page.



Zdeblick et al. disclose all elements of the claimed invention except for anterior threads extending outwardly from the anterior conical portion for at least two revolutions and posterior threads extending outwardly from the posterior surface for at least two revolutions.

At the time the invention was made, it would have been a matter of obvious design choice to a person of ordinary skill in the art to provide anterior and posterior threads extending for at least two revolutions because Applicant has not disclosed that providing at least two revolutions of anterior and posterior threads provides an advantage, is used for a particular purpose, or solves a stated problem. It would have been prima facie obvious to modify Zdeblick et al. to obtain the invention specified in claims 1, 9, 16, 26 and 28 because such a modification would have been considered a mere design consideration which fails to patentably distinguish over the prior art of Zdeblick et al.

Claims 4-7, 11-14 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zdeblick et al. (US 5,669,909) in view of Foley et al. (US 6,576,017).

Zdeblick et al. disclose all elements of the claimed invention except for an end cap member or a stabilizing structure secured to the implant.

Foley et al. teach a ligament or "end cap member" or "stabilizing structure" that extends laterally from opposite sides of an implant and is secured to adjacent bony structures to resist expulsion of the implant from the intervertebral disc space (Fig. 5, col. 1, lines 57-61 and col. 3, lines 18-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a stabilizing structure or end cap member, as taught by Foley et al., to secure the Zdeblick et al. implant to adjacent bony structures, to prevent expulsion of the implant of the combination of Zdeblick et al. and Foley et al. from intervertebral space.

Response to Arguments

Applicant's arguments submitted under "REMARKS" in the response filed on June 12, 2006 have been fully considered and are not persuasive for the following reasons.

Regarding claims 1-4, 6-11, 13-19, 21-23, 26 and 29, Nolan discloses an embodiment in which spacer device 2 is externally threaded (Fig. 18).

Regarding claims 24, 25, 27 and 29, Shapiro et al. disclose a spacer having a truncated substantially funnel-shaped side profile (Fig. 1, 7 and 8). It is the Examiner's position that the Shapiro et al. spacer has shape that resembles a funnel in that it has a conical shape and has a hole at the apex (Source: The American Heritage® Dictionary of the English Language: Fourth Edition. 2000). During examination, claims must be interpreted as broadly as their terms reasonably allow. This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. In re Zletz, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anu Ramana whose telephone number is (571) 272-4718. The examiner can normally be reached Monday through Friday between 8:00 am to 5:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached at (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AR 
August 31, 2006